

What is claimed is:

1. A method of dispensing a desiccant packet to a target, comprising the steps of:

providing a strip of desiccant packets separated by packet webbing;

5 providing a desiccant dispenser including a dual tractor belt drive system for advancing the strip of desiccant packets through the desiccant dispenser, a clamp assembly for clamping the strip of desiccant packets prior to cutting, a cutter blade assembly for cutting a desiccant packet from the strip of desiccant packets, and a position sensor for determining if the clamp assembly clamped on a desiccant packet  
10 instead of the packet webbing between desiccant packets;

determining with the position sensor if the clamp assembly clamped on a desiccant packet instead of the packet webbing between desiccant packets;

cutting a desiccant packet from the strip of desiccant packets with the cutter blade assembly and dispensing the desiccant packet on the target by cutting the packet  
15 webbing above a desiccant packet if it is determined that the clamp assembly is not clamped on a desiccant packet; and

preventing the cutter blade assembly from cutting the strip of desiccant packets if it is determined that the clamp assembly is clamped on a desiccant packet.

2. The method of claim 1, further including a fiber-optic desiccant sensor,  
20 and the method further including the steps of sensing with the fiber-optic sensor the webbing between desiccant packets, and preventing the cutter blade assembly from cutting the strip of desiccant packets if the webbing between desiccant packets is not sensed.

3. The method of claim 1, further including a photoelectric sensor, and the method further including the steps of determining with the photoelectric sensor whether the target is below the desiccant dispenser, and preventing the cutter blade assembly from cutting the strip of desiccant packets if it is determined that target is not below the  
5 desiccant dispenser.

4. The method of claim 1, wherein the cutter blade assembly includes a rotary blade with a blade portion having opposite angled cutting faces.

5. The method of claim 4, wherein the rotary blade rotates less than 30 degrees during cutting.

10 6. The method of claim 1, further including a manual cutting length adjustment mechanism for manually adjusting the cutting position of the cutter blade assembly, and the method further including manually adjusting the cutting position of the cutter blade assembly with the manual cutting length adjustment mechanism.

15 7. The method of claim 1, wherein the dual tractor belt drive system includes a left roller assembly and a left tractor belt driven by the left roller assembly and a right roller assembly and a right tractor belt driven by the right roller assembly, the desiccant dispenser further including a belt roller positioning mechanism for moving both roller assemblies and tractor belts between an open and a closed position, and the method further including moving both roller assemblies and tractor belts between an open and a  
20 closed position using the belt roller positioning mechanism.

8. The method of claim 7, wherein left tractor belt and right tractor belt include parallel lower portions, and the belt roller positioning mechanism moves both

roller assemblies and tractor belts between an open and a closed position while maintaining the lower portions of the tractor belts parallel to each other.

9. The method of claim 8, wherein the dual tractor belt drive system includes one or more springs that cause the lower portions of the tractor belts to be urged  
5 towards each other.

10. A method of dispensing a desiccant packet to a target, comprising the steps of:

providing a strip of desiccant packets separated by packet webbing;

providing a desiccant dispenser including a dual tractor belt drive system for

10 advancing the strip of desiccant packets through the desiccant dispenser, the dual tractor belt drive system including a left roller assembly and a left tractor belt driven by the left roller assembly and a right roller assembly and a right tractor belt driven by the right roller assembly, a belt roller positioning mechanism for moving both roller assemblies and tractor belts between an open and a closed position, a clamp assembly  
15 for clamping the strip of desiccant packets prior to cutting, and a cutter blade assembly for cutting a desiccant packet from the strip of desiccant packets;

moving both roller assemblies and tractor belts to an open position using the belt roller positioning mechanism and inserting the strip of desiccant packets between the tractor belts;

20 moving both roller assemblies and tractor belts to a closed position using the belt roller positioning mechanism to maintain the strip of desiccant packets between the tractor belts; and

cutting a desiccant packet from the strip of desiccant packets with the cutter blade assembly and dispensing the desiccant packet on the target by cutting the packet webbing above a desiccant packet.

11. The method of claim 10, wherein the left tractor belt and the right tractor belt include parallel lower portions, and the belt roller positioning mechanism moves both roller assemblies and tractor belts between an open and a closed position while maintaining the lower portions of the tractor belts parallel to each other.

12. The method of claim 11, wherein the dual tractor belt drive system includes one or more springs that cause the lower portions of the tractor belts to be urged towards each other.

13. The method of claim 10, further including a manual cutting length adjustment mechanism for manually adjusting the cutting position of the cutter blade assembly, and the method further including manually adjusting the cutting position of the cutter blade assembly with the manual cutting length adjustment mechanism.

14. A method of dispensing a desiccant packet to a target, comprising the steps of:

providing a strip of desiccant packets separated by packet webbing;

providing a desiccant dispenser including a dual tractor belt drive system for advancing the strip of desiccant packets through the desiccant dispenser, a clamp assembly for clamping the strip of desiccant packets prior to cutting, a cutter blade assembly for cutting a desiccant packet from the strip of desiccant packets, the cutter blade assembly including a rotary blade with a blade portion having opposite angled cutting faces;

cutting a desiccant packet from the strip of desiccant packets with the opposite angled cutting faces of the rotary blade of the cutter blade assembly without shearing the strip; and

dispensing the desiccant packet on the target.

5           15.    The method of claim 14, wherein the rotary blade rotates less than 30 degrees during cutting.

          16.    The method of claim 14, further including a manual cutting length adjustment mechanism for manually adjusting the cutting position of the cutter blade assembly, and the method further including manually adjusting the cutting position of  
10   the cutter blade assembly with the manual cutting length adjustment mechanism.